[process] to limit thickness of sidewall polymer; [and separate]

b) vacuum chamber means [for] to chemically modify polymer rails by supplying a mixture of an etching gas and an acid neutralizing gas [into a vacuum chamber] [in which said structure is supported] to form a water soluble material of sidewall polymer rails left behind on the Al/Cu metal line from the RIE process, [thereby permitting]; and

c) rinse chamber means to remove [removal of] the water soluble material with deionized water.

14. (Twice Amended) The integrated[ion] metal etch tool of claim 13 wherein said [separate] strip chamber means for a water-only plasma [process allows conducting] conducts said water-only plasma [process] at temperatures between about 175°C-200°C [to limit the thickness of the sidewall polymer].

15. (Twice Amended) The integration metal tool of claim 13 wherein said [separate] strip chamber means for a water-only plasma [process permits conducting] conducts said water-only plasma [process] at temperatures greater than 200°C to form a passivation layer on the Al/Cu metal line surface [prior to forming a water soluble material of sidewall polymer rails].

16. (Twice Amended) In a metal etch tool for removing post-RIE polymer rails formed on a Al/Cu metal line of a semiconductor structure, the improvement comprising[:] an integrated metal etch tool comprising therein:

a) vacuum [separate] chamber means [for supplying] to provide a mixture of an etching gas and an acid neutralizing gas [into a vacuum chamber in which] to said [composite] structure [is supported] to form a water soluble material of sidewall polymer rails left behind on Al/Cu metal line from the RIE process; [said separate] and;

b) strip chamber means [permitting] for removal of photo-resist from said structure by chemical downstream etching or plasma.

17. (Twice Amended) The integrated [ion] metal etch tool of claim 16 wherein said [separate] strip chamber means [permitting removal of photo-resist by chemical down stream etching allows said] conducts chemical down stream etching [to be conducted] at temperatures greater than 200°C to form a passivation layer on the Al/Cu metal line surface.

CORRECTED VERSION OF CLAIMS

13. (Twice Amended) In a metal etch tool for removing post-RIE polymer rails formed on a Al/Cu metal line of a semiconductor structure, the improvement comprising an integrated metal etch tool comprising therein:

a) strip chamber means to strip the photo-resist layer of a semiconductor composite structure with water only plasma subsequent to a RIE to limit thickness of sidewall polymer;

b) vacuum chamber means to chemically modify polymer rails by supplying a mixture of an etching gas and an acid neutralizing gas to form a water soluble material of sidewall polymer rails left behind on the Al/Cu metal line from the RIE process; and

c) rinse chamber means to remove the water soluble material with deionized water.

14. (Twice Amended) The integrated metal etch tool of claim 13 wherein said strip chamber means ~~for a water-only plasma~~ conducts ~~said~~ a water-only plasma at temperatures between about 175°C-200°C.

15. (Twice Amended) The integration metal tool of claim 13 wherein the said strip chamber means for a water-only plasma conducts said water-only plasma at temperatures greater than 200°C to form a passivation layer on the Al/Cu metal line surface.

16. (Twice Amended) In a metal etch tool for removing post-RIE polymer rails formed on a Al/Cu metal line of a semiconductor structure, the improvement comprising an integrated metal etch tool comprising therein:

a) vacuum chamber means to provide a mixture of an etching gas and an acid neutralizing gas to said structure to form a water soluble material of sidewall polymer rails left behind on a Al/Cu metal line from the RIE process; and

b) strip chamber means for removal of photo-resist from said structure by chemical downstream etching or plasma.